Chariots, Horses, and the Vedic Aryans

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This is a brief note on the expansion of Indo-European languages from the Atlantic in the west to the Bay of Bengal in the east in a comparatively short time assumed to be the result of the use of horses and chariots as force multiplier by the early speakers of the languages. The second part of it looks into the evidence for the claim that these also facilitated Indo-Aryan migration or invasion into South Asia later in the second millennium BCE.

The horses, chariots, and the Indo-Europeans

The 'Steppe model' for the spread of the IE language throughout Eurasia in a comparatively short time along with the displacement of local languages in all these regions, was difficult to explain without the means of fast transport and military superiority of the early IE speakers. The Pontic-Caspian as well as the Central Steppe always had an abundant supply of wild horses (Equus ferus caballus). Linking these seemed to give a well-rounded explanation for IE expansion throughout Eurasia. This model attributes the mobility of the steppe nomads to the domestication of the horse and later the use of early chariots.

The evidence for this model comes from linguistic paleontology. In particular, certain words to do with the technology of wheeled vehicles and the domestication of horses are present across all the branches of the Indo-European family. Added to these are the archaeological evidence for the use of wheeled wagons and the domestication of horses in the steppe from the third MBCE. Based on these it became the firm conviction among many that Indo-European language-speaking western steppe nomads were the first to master these technologies and that it gave them a tremendous military advantage over their opponents who were all numerically and culturally superior long-settled farmers or urbanized well-organised societies.

Proponents of the steppe homeland of IE theory have viewed horses as the chief instrument of the early Indo-Europeans' victory over the far more numerous non-Indo-Europeans in much of Eurasia. Wendy Doniger (1981: 239), for instance, says that the horse was "the supreme symbol of the victorious Indo-Europeans [...] whose domestication enabled them to conquer the Indo-European world".

The original Indo-Europeans were imagined as a horde of Bronze Age horse-riding warriors, who came hurtling out of the steppes, overwhelming the simple peasant cultures of Europe and even toppling the civilization of the Indus Valley which was far ahead of the nomads in many other technologies.

But a closer look at these assertions and beliefs reveals many grey areas and weaknesses.

The Dereivka bitted horse was considered very important at the time of its discovery because it was found at a well-dated site (~4000 BCE) and was the basis of the commonly held theory that the earliest domestication of the horse took place in Ukraine during the 4th or 5th millennium BCE. But now we know that the Dereivka horse died between ~700 and 200 BCE. With this, the main evidence for the domestication of horses in the western steppe in the third or even second MBCE is debunked.

The earliest clear evidence of domestication comes from the Botai culture (3,500 BC), found in the northern central steppe. However, the steppe model will find it difficult to accommodate Botai people as early IE speakers predating Yamnaya nomads. Our inflexible belief in the steppe model forces us to assert that the Yamnaya herders were IE speakers while the Botai were not, without any evidence in either case.

The full domestication of the horse might have been a long-drawn-out process, that not only involved the development of horse harness and handling techniques but also the physical and behavioural transformation of a generally untameable wild animal, through many generations of selective breeding. Horses were probably the most difficult animals domesticated by humans compared to others like dogs, sheep, cattle, or even elephants. In the first stage, it was just capturing and holding the animals in captivity for use as a readily available source of food. This may have been the case with Botai. A few pioneers among them might have tried mounting and raiding it as an adventurous sport.

We have no clear evidence of when riding horses became common. There are claims of evidence of early riding gear from the western steppe, but this evidence seems far from conclusive. Even if the Proto-IE people had learned to ride horses, their horsemanship might not have been very effective, useful, or common. Horses may have been used for pulling wagons before but its effectiveness, particularly as something that gave the riders a military advantage, is doubtful. The extensive and very effective use of chariots for warfare in Persia, The Fertile Crescent, Anatolia as well as the steppes till about 500 BCE may be an indication that cavalry was not in use till about that time. This is because the comparatively clumsy chariots might have had little chance against a fast, flexible cavalry. Significantly, chariots ceased to be used as a war machine at about the time horse-riding steppe tribes began to ravage Eurasia.

The steppe nomads are known to have become such fearsome warriors only from around 1000 BC when they adopted more effective riding gear and developed new breeds of horses as well as novel fighting strategies. It is only from this time onwards that we find extensive evidence of horseback warriors.

One of the earliest pieces of evidence of horse domestication is the “horse training manual” by ‘Kikkuli the Mitannian’. But intriguingly, it does not seem to talk about riding horses but only walking them. It is not clear why this is so. It is possible that the manual was for training “chariot horses”. Similarly, Rigveda has many references to `Asva`, the word for horses in later classical Sanskrit. But none of these mention horse riding by men or even Devas.

Thus, based on the present evidence, it is uncertain if horses were effectively militarised before the first MBCE.

The horses, chariots, and the Indo-Aryans.

Once the strong link between the early Indo-Europeans and the horses came to be considered as a given, it seemed logical to assert that the IE spread all over Eurasia was largely the result of the invaders` use of mounted horses and war chariots. With this, it was easy to connect Vedic Aryans to the steppe, as Vedas have many references to “Radhas” and “Asvas”, words that came to mean chariots and horses in the later Paninian Sanskrit.

The Indo-Aryan are thought to have introduced the horse into South Asia in around 1500 BCE and used its speed to great advantage to subdue the "horseless" native populations. Many authors conclude that RV is a "horse-centered" text. Mallory asserts that RV is a "horse-centred culture" (Mallory 1989: 46), since the word Asva or its synonyms (arvan, haya, vâjin) occur in RV hundreds of times. In D.D. Kosambi's opinion (1975: 108) "there can be no doubt that the animal is an Aryan beast". A.L. Basham (1963: 27) asserts that the Aryans "had learned to make full use of the swift and terror-striking beast of the steppes". "Horses too were essential and prized, since they enabled the Āryas' mobility and contributed to their success in battle". Stephanie W. Jamison and Joel P. Brereton (2014).

The authors come to these conclusions based on some dubious translations of RV. For example, most references to Ashvas in RV may not be to actual horses but to some natural phenomena.

Many of the horses of RV are "mind-yoked" to the chariots of Gods.

RV 1.14.6

Let the swift steeds who carry thee, thought-yoked (manoyujo) and dropping holy oil, Bring the Gods to the Soma draught.

RV 4.48.4

May nine-and-ninety harnessed steeds who yoke them at thy will (manoyujo) bring thee. O Vāyu, on refulgent car, come to the drinking of the juice. (Vayu is the Vedic God of air or wind)

RV 5.75.6

Hither, O Heroes, let your steeds, of dappled hue, yoked at the thought (manoyujo),
Your flying steeds, O Aśvins, bring you hitherward, with bliss, to drink. Lovers of sweetness, hear my call.

The word "manoyujo" or mind-yoked horses occurs in several RV hymns and the horses are "flying" animals. We can only indulge in idle speculation on what the composers intended by this word or "flying steeds". Many verses in RV mention Asvin`s flying chariot. Asvins are twin solar deities of RV and are associated with the goddess Ushas (Dawn) as her close companions. One hymn says Asvin`s flying chariot flew over the sea for three days to rescue a drowning man. It is difficult to see how the mind can yoke horses to chariots or what flying horses and chariots mean.

The only logical inference one can draw from these "discordant metaphors" is that the composers of RV use the term asva for Deified astronomical or atmospheric phenomena and for its physical counterparts of something that moves fast which can be any animal or bird or even wind. Significantly, there is no reference in RV mentioning riding horses, either by human or Divine riders.

One verse that may be truly revealing is RV 7.77.5

Send thy most excellent beams to shine and light us, giving us lengthened days, O Dawn, O Goddess,
Granting us food, thou who hast all things precious, and bounty rich in chariots, kine, and horses.

Dawn has a rich bounty of chariots, cattle, and horses (ghomadaśvāvad rathavacca rādhaḥ). It is clear that the chariots, cows, and horses mentioned are some celestial or atmospheric phenomena.

From the article titled “ON THE TRUE MEANING OF ASHVA IN RIGVEDA” By A.A. Cemehehko

“The authors of RV understand very clearly that the basic meaning of the word ‘asva’ usually wrongly translated as ‘horse’ is in fact ‘a swift creature’ and nothing more. Not only true horses but also many other animals — among them Equus hemionus khur and Equus kiang both endemic in South Asia — can be very swift and may therefore be called Ashvas. Thus, Pushan is described in RV as the best charioteer (rathī́tamam (VI.55.2), rathī́tama (VI.56.2, 3)) whose wheel is not breaking, whose truck body is not falling down and whose felloe is not staggering. But his Ashvas drawing his chariot are not horses but goats (ajāśuva (I.138.4 — two times; VI.55.3), pusanam ajā́śuvam (VI.55.4), ā́jā́sa pusanam ráthe vahantu (VI.55.6), ajā́ anyásya váhnayo (VI.57.3), ajā́śuvah pusa (VI.58.2, IX.67.10). Goats are depicted as driving (divine) chariots in ancient Greek, Roman, and German traditions also”.

It appears that the Indo-Aryans freely experimented with different drawing animals, yoking goats, donkeys (I.162.21), (I.34.9), (III.53.5), and bulls (I.116.18), (V.80.2–3), (VI.27.8)). RV 10.102 might be describing a fight between Indra and his Dasa and Arya enemies and Indra`s Radha is pulled by oxen. Humped bulls are the drawing animals of Ashvins’ chariot (V.73.7), (V.75.4). Significantly, the Ashvins had Ashvas were donkeys and bulls! Even a cow is yoked in the chariot (VIII.94.1). And all these animals and birds are called “Asva” in RV.

Many scholars have asserted that RV is full of war chariots. But none of the instances where Radha is mentioned in RV has anything to do with war. Aryans steal and rob chariots from Dasas and Panis but do not use them as war chariots.

The chariot in RV 1.123.1 is broad. In 6.61.13 it is “Created vast for victory like a chariot”. RV10.53.7 “Bring hitherward the car with seats where eight may sit.” Thus, if we go by a literal reading of RV, the Rigvedic chariots were all big, too big to be real ones.

References in Rigveda about the style, size, materials, and engineering of chariots seem to indicate that these Vedic Chariots differed substantially from those unearthed in sites of the Sintashta-Arkaim culture, the hypothesized ancestral home of Vedic Aryans. The Sintashta chariots were light, narrow, and could carry only one or at the most two riders.

Many occurrences of the word ’Radha’ in Rigveda are of one-wheeled, three-wheeled, and seven-wheeled ones (RV 2.40.3 speaks about seven-wheeled chariots in the sky). These are unlikely to be describing terrestrial ones.

RV 1.116.4

“the strand of the ocean, in three cars (radhih), hundred-footed, with six horses”.

It seems to say that three chariots with six horses flew over the ocean for three days. Surely what it talks about are not chariots or horses we are familiar with.

RV 1.30.19
“One chariot wheel ye ever keep the other round the sky revolves”.

The two wheels of the chariot are said to move differently. The next three verses of the hymn make it quite clear it talks about ‘down’ (usah) and the word ‘ratha’ is used in some symbolic sense.

RV 5.22

“Abandoned in the sea, that with winged steeds your car (ratha) might fly” or RV 8.5.28
“Ascend your car (ratha) with golden seat, O Aśvins, and with reins of gold, that reaches even to the sky”.

Again, it is clear that what these verses are talking about are not normal chariots.

RV 1.34.9

“the three wheels of your triple chariot, where are the three seats thereto firmly fastened?”
Talks about the 3-wheeled flying chariot of Aswins.

1.164.2

“Seven to the one-wheeled chariot yoke the Courser; bearing seven names the single Courser draws it.
Three-naved the wheel is, sound and undecaying, whereon are resting all these worlds of being.”

Now a one-wheeled chariot with seven harnesses and one horse with seven names! The unageing, unassailable wheel, on which all these living beings rest!

Another even more mysterious reference is in RV 7.64.4. Griffith's interpretation of it simply makes no sense.

“Him who hath wrought for you this car in spirit, who makes the song rise upward and sustains it,
Bedew with fatness, Varuna, and Mitra ye Kings, make glad the pleasant dwelling places”.

Another example is RV 1.118.5 quoted below as translated by Griffith.

The youthful Daughter of the Sun, delighting in you, ascended there your chariot, Heroes.
Borne on their swift wings let your beauteous horses, your birds of ruddy hue, convey you near us.

The verse is talking about “The youthful Daughter of the Sun” or dawn and the horses and chariots are clearly symbolic descriptions of dawn.

RV 10.85 is the well-known marriage hymn and talks about a chariot made by mind. The bride Surya (sun) travels in a chariot made of mind.

10 Her spirit was the bridal car (mano asyā ana āsīd dyaurāsīduta chadiḥ),

12 a spirit-fashioried car (anomanasmayaṃ).

RV 10.135.3. talks about a chariot without wheels constructed on a ship by the mind which turns in all directions. Curiously the verse says that the person standing on it does not see it.

Thou mountest, though thou dost not see, O Child, the new and wheel-less car
Which thou hast fashioned mentally, one poled but turning every way.

Given these references and many others in RV, it is uncertain if Vedic Aryans were familiar with either of actual horses or chariots. The most common words in RV that are translated as horse and chariot may be unrelated to these. A close reading of the RV seems to suggest that these words which came to mean horse and chariot in later classical Sanskrit can make sense only as some natural phenomena. Many of these hymns might be celebrating nature, whose forces are deified.

If we accept the literal meaning of the word Asva, then India's natives already had horses before the Aryans' supposed arrival, or at least the locals processed far more horses than the Invading Aryans that Aryans had to steal or rob or grab horses from the locals. This makes depictions of supposedly glorious colonial conquests and assertions like "The first appearance of [the invading Aryans'] thundering chariots must have stricken the local population with a terror, similar to that experienced by the Aztecs and Incas upon the arrival of the iron-clad, horse-riding Spaniards" amusing or even absurd.

RV 10.108 is a colloquy between Panis (Probably a group of traders) and the bird Sarama, a messenger of Indra, in which Sarama is demanding tributes to Indra in the form of cattle or horses.

2 I come appointed messenger of Indra, seeking your ample stores of wealth, O Paṇis.
This hath preserved me from the fear of crossing: thus have I made my way o'er Rasā's waters.

At no point does Saramå complain that they were stolen from the "Aryans": "I come in search of your great treasures".

There are other references in RV indicating that Dasyus and Panis processed Asvas and Radhas. Nowhere it is said that these were stolen from Aryans. Every one of these verses says that it was Indra who robbed them from Dasyus and Panis.

RV 1.83.4

First, the Angirases won themselves vital power, whose fires were kindled through good deeds and sacrifice.
The men together found the Pani's hoarded wealth, the cattle, and the wealth in horses and in kine.

RV 3.34.9

He gained possession of the Sun and Horses, Indra obtained the Cow who feedeth many. Treasure of gold he won; he smote the Dasyus and gave protection to the Āryan color.

Griffith`s translation is “elliptical”. The hymn is even otherwise incomprehensible.

Another translation of the above verse in J&B 2014

“He won the steeds and the sun he won; Indra won the cow of many benefits, and the benefit of gold he won. Having smashed the Dasyus, he aided the Ārya hue”.

The expression “steeds and the sun” sounds strange to us, not because of the use of “discordant metaphors” by the composers of RV but because of our inability to grasp the real significance of the expression.

RV 10.67.6

As with a hand, so with his roaring Indra cleft Vala through, the guardian of the cattle. Seeking the milk-draught with sweat shining comrades he stole the Pani's kine and left him weeping.

The text does not say the Panis stole the horses and cows. The last verse makes it quite clear that it was Indra who stole the cattle. However, many well-known scholars keep repeating the charge.

Dasyus also had chariots. RV 2.15.4 says Indra saved Dabhiti from Dasyus and gave him the “kine and cars and horses” taken from them.

Compassing those who bore away Dabhīti, in kindled fire he burnt up all their weapons. And made him rich with kine and cars and horses. These things did Indra in the Soma's rapture.

One implication of this is that the Dasyus, Dasas, and Panis, treated in most translations as the Aryans’ indigenous adversaries, had horses of their own and the invading Aryans had to steal or rob these from them. This makes assertions like “horses enabled the 'Aryas’ mobility and contributed to their success in battle”, when the 'Aryas’ enemies were themselves rich in horses and Aryans had to steal them from them, inane and absurd.

The only three hymns in Rigveda that describe a battle in some detail do not mention horses or chariots being used by either side in the conflict.

“The battle of ten petty kings” described in ‘The Dasarajna’ hymns RV 7.18, RV 7.33, and 7.83 are the only hymns in Rigveda that describe a battle in detail.

These hymns speak about a battle between the Bharata king Sudasa, the king of the land around River Sarasvati, and ten petty kings, in which Sudasa was victorious in the end. The poems say Indra gifted the wealth of the defeated side to various people who sided with Bharatas.

‘The Dasarajna’ hymns are often mentioned as evidence of the Aryan invasion of North-West India. But there is no mention of the use of chariots or horses in battle in these hymns. It would be strange if invading “horse and chariot rich Aryans” did not use either of these in this battle.

Another hymn that may be describing a battle involving chariots is RV 10.102. But it talks about chariots pulled by bulls.

Most translators decided that the Aryas were nomadic pastoralists, but the word Gow is mostly used in the text to refer to rays of light in the morning. Monier Williams offers meanings such as “herds of the sky”, “the sun’s ray”, and “the sun” for the word ‘Gow’ in RV which came to mean cows in classical Sanskrit.

“Forts”, “dark-skinned enemies”, “battles”, “chariots” and “spoked wheels” are almost always metaphors for concepts like time (RV 164), natural phenomena, or nature gods, and their perceived effects.

Firm belief in this story of horse-rich Aryans and horse-poor Harappans led to the inference that the Indus Valley (IVC) and Vedic culture were unrelated, as very few horses or chariot ‘remains’ have been found in the Indus Valley sites. The horse-and-chariot-rich Vedic culture and the horse-and-chariot-poor IVC or North-West India of the second millennium BCE binary is a common theme in all Aryan invasion/migration models.

It is argued that since archaeology has not found evidence of chariots or domesticated horses in South Asia before 1500 BCE and since there are references to these in RV, the text cannot be dated before that date. Such an argument is illogical, to say the least, as the absence of evidence is not evidence of absence. Besides, there is no sudden increase in findings of horse remains at any time in the second MBCE. This trashes the “Indo-Aryans invading SA in the second MBCE on horseback and war chariots” scenario.

There are many horses and chariots in the various translations of the Rigveda. But these are very few or even absent in the source text. When the word ásva is present it often appears simply to describe something that moves swiftly, often over water or in the sky. It is possible that the word asva found in RV was adapted in later texts for the horse. Thus, the conclusion that Vedic Aryans invaded North-West India in war chariots drawn by horses needs far more substantial evidence.

If we decide that a literal reading of the words Asva and Radha is justified as the use of these as metaphors should imply the presence of physical equivalents of these, then by the same logic we should also accept that the local population of North-Weast India of the period were equally rich in these compared to the invading Aryas as many RV verses quoted above suggests. Accepting the former and rejecting the latter may be self-deception. Without the hypothesized military superiority afforded by the chariots and horses, the Aryas would have been greatly disadvantaged given the overwhelming numerical superiority of the locals.

Conclusion

There may be two reasons for translations of RV reading like riddles. First, we read the text applying currently known meanings to words, but these may have undergone considerable semantic shifts since the time RV was composed. Secondly, we invariably have to ignore many expressions and phrases in almost every verse that do not seem to make any sense. This restricts our comprehension to only parts of most verses.

Many translators also resort to the supply of "silent" words that are not part of the original text to make sense of it or extract sense that is consistent with their notion of what the verses should mean. These should warn us that something is amiss and that the translations we use may be misleading. These translations may "not so much revealing the sense, as hammering and forging rebellious material into some sort of sense and consistency."

The composers of RV seem to have used a style that uses symbolisms, metaphors, similes, and riddles extensively. The meaning of many of these and the many non-sequitur webs of opaque references are like puzzles with major pieces of the jigsaw missing or in the wrong place. Most verses are open to multiple interpretations. Together with the archaism of the language, these make facile interpretations or literal translations erroneous, presumptive, and misguided. These mistranslations include words for horses (Asva), chariots (Radha), and cows (Gow) which are of crucial importance for the theories related to the spread of IE languages in South Asia.

It is interesting to speculate if the language of RV was at a stage before the PIE roots for these words underwent semantic shifts and came to mean horses, cows, and chariots.

Much of the archaic vocabulary of the Rigveda reappears in the later texts. However, a significant proportion of this vocabulary was seriously misunderstood by the time of the composition of the derivative texts and commentaries. These later commentaries of Rigveda and composers of later Vedic texts did not understand the meaning, context, or theme of the verses and so developed some atrocious and absurd etymologies for many of the terms that occur in these verses, so that they are made to conform to the ritual context. All available translations use these flawed semantics and etymologies. When the translators judge these to be not consistent with their pre-conceived notions of the text they substitute them for their own ones.

Most translations of RV adopt a literalist reading of the verses. But most of these make little sense and are dubious and preposterous. How do we make sense of statements like "A one-poled chariot without wheels but turning every way constructed by the mind that cannot be seen" (RV 10.135.3) or "Dawn has a rich bounty of chariots, cattle, and horses" (RV 7.77.5) (ghomadaśvāvad rathavacca rādhah.) or a spirit-fashioned car (anomanasmayam) or "he who constructs the high seat of the chariot in his mind". (RV 7.64.4 yo vam ghartam manasā taksadetamūrdhvam dhītim krnavad dhārayacca). RV 2.23.3 ratham ṛtasya tisthasi – "refulgent car of sacrifice" (Griffith). Griffith translates Rta as a sacrifice. A better translation may be "a brilliant chariot of nature" which again does not make much sense unless we interpret it as some celestial body like the sun.

These are just indicative. One comes across such statements in almost every verse of RV.

In any case, literalist reading of a phrase, passage, or text is possible only when its direct meaning is clear. Many verses and hymns of RV just do not make any consistent sense.

These verses must be translated with discernment but without the hubris of dismissing elements incongruent with our subjective opinion of what they should say. The Rigvedic world was anchored in a cultural and civilizational milieu very different from ours. Rubbishing them as worthless fables, “discordant metaphors”, atrocious etymologies, or perversions of the text would be celebrating our deficient scholarship.

Given these, building narratives of IE language family history or Aryan migrations based on vague references, expressions, and words occurring RV may be widely off the mark.

The Rigveda is telling us something that we find difficult to comprehend. As I see it, there are five possibilities of what the hymns are about.

1 These are just blabbering of intoxicated barbarians. Few will agree with this.

2 These are what the invading Indo-Aryans of the second millennium BCE recorded about their early experience in South Asia. Such a conclusion will have to account for many inconsistencies, expressions, and references in the text.

3 Rigveda or “Mantra” does not have meaning. It is for doing and not for understanding. This was the position of ritualists or “Meemmasikas” until recently. It was believed that it was the “Nada Brahma” or vibrations of the cosmic consciousness heard by ancient sages who in turn passed it on to their disciples in a human-comprehensible form.

4 These contain some very advanced knowledge about cosmogony, cosmology, and laws of nature.

5 It contains the simple understanding of an early civilizing society that may have been advanced for its time and given to deep philosophical introspection about natural phenomena, life, death, etc. For some reason, they composed these in a very enigmatic language full of symbolisms, metaphors, similes, and riddles that their contemporary audience may have understood.

I opt for the last.